

Wrong enzymes used for WC1 and WC2 !

NEW CLONING

- Digest of
 - WC1 with XbaI and PstI
 - WC2 with EcoRI and SpeI
 - psB1C3 with XbaI and PstI
 - psB1C3 with EcoRI and SpeI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10 min
- Ligation of:
 - WC1 in psB1C3
 - WC2 in psB1C3
 - Put on the fridge overnight

SET UP MINICULTURES

- Pick selected colony and add it on 6mL of LB with Chloramphenicol
 - P2A in psB1C3 GFP (X3)
 - NLP22 in psB1C3 (X2)
 - DSIP in psB1C3 (X2)
- Put tubes on the shaking incubator at 37°C

MINIPREP

- Miniprep of:
 - WC1 in psB1C3 (X1)
 - pFRQ in psB1C3 (X1)
 - NLP22 in psB1C3 (X4)
 - DSIP in psB1C3 (X4)
 - P2A GFP in psB1C3 (X3)
 - NLP22 in psB1C3 (X2)
 - DSIP in psB1C3 (X2)

PCR

- Amplification of:

pRPS27 (with HF buffer)

pRPS27 (with GC buffer)

+ HF control and GC control

Hybridation temperature used: 45°C

Elongation time used: 25sec

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing pXBP1(gibson 07-28-16) (LB + Chloramphenicol)
 - psB1C3 containing pUNC119 (gibson 07-28-16)
 - psB1C3 containing WC1 (cloning 08-01-16)
 - psB1C3 containing WC2(cloning 08-01-16)
- Agar plates put at 37°C

GEL MIGRATION

- Gel verification of amplification (pcr product of pRPS27 ; 08-01-16)
 - Agarose gel: 1%
 - 100 mV, 30 min

=> No amplification observed

QUANTITATIVE ANALYSIS (Miniprep 08-01-16)

psB1C3 P2A GFP 1: 22,2 ng/ μ L
psB1C3 P2A GFP 2: 25,3 ng/ μ L
psB1C3 P2A GFP 3: 7,4 ng/ μ L
psB1C3 NLP22 1: 20,1 ng/ μ L
psB1C3 NLP22 2: 33,4 ng/ μ L
psB1C3 NLP22 3: 21,3 ng/ μ L
psB1C3 NLP22 4: 19,6 ng/ μ L
psB1C3 NLP22 5: 26,7 ng/ μ L
psB1C3 NLP22 6: 29,8 ng/ μ L
psB1C3 DSIP 1: 27,1 ng/ μ L
psB1C3 DSIP 2: 10,7 ng/ μ L
psB1C3 DSIP 3: 22,9 ng/ μ L
psB1C3 DSIP 4: 20,9 ng/ μ L
psB1C3 DSIP 5: 21,2 ng/ μ L
psB1C3 DSIP 6: 18,2 ng/ μ L
psB1C3 pFRQ 4: 20,9 ng/ μ L

GEL MIGRATION

- Gel verification of cloning

Fisrt, the plasmid is digested with EcorI and PstI 1h at 37°C (+ control only digested with P)

Agarose gel: 1%

100 mV, 30 min

Gel Map:

2-log ladder

empty vector

psB1C3 P2A GFP 1

psB1C3 P2A GFP 2

psB1C3 pFRQ 1

psB1C3 pFRQ 2

psB1C3 NLP22 1

psB1C3 DSIP 1

=> GOOD:

psB1C3 P2A GFP 2

psB1C3 pFRQ 1

psB1C3 pFRQ 2

psB1C3 NLP22 1

GEL MIGRATION

- Gel verification of cloning

Fisrt, the plasmid is digested with EcoRI and PstI 1h at 37°C (+ control only digested with P)

Agarose gel: 1%

100 mV, 30 min

Gel Map:

2-log ladder

empty vector

psB1C3 NLP22 2

psB1C3 NLP22 3

psB1C3 NLP22 4

psB1C3 NLP22 5

psB1C3 NLP22 6

Gel Map:

2-log ladder

empty vector

psB1C3 DSIP 2

psB1C3 DSIP 3

psB1C3 DSIP 4

psB1C3 DSIP 5

psB1C3 DSIP 6

=> NOTHING !

CLONING

- Digest of

psB1C3 with EcoRI and PstI

pFRQ with EcoRI and SpeI

NLP22 with XbaI and PstI

psB1C3 GFP with EcoRI and SpeI

- Put on the incubator at 37°C during 1h

- Dephosphorylation of psB1C3 and psB1C3 GFP

Put on the incubator at 37°C during 1h

- Phosphatase inactivation

At 80°C during 10 min

- Ligation

NLP22 in psB1C3

pFRQ in psB1C3

Put on the fridge overnight

CLONING

- Digest of
 - psB1C3 with XbaI and PstI
 - pUNC 119 with XbaI and PstI
 - psB1C3 with EcoRI and PstI
 - pXBP1 with EcoRI and PstI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10 min
- Ligation
 - pUNC119 in psB1C3
 - pXBP1 in psB1C3
 - Put on the fridge overnight

PCR

- Amplification of:
 - WC1
 - WC2
 - + Control

Hybridation temperature used: 63°C
Elongation time used: 2min 15sec

PCR

- Amplification of:
 - pRPS27
 - + Control

Hybridation temperature used: XX°C
Elongation time used: XXsec

GEL MIGRATION

- Gel verification for an amplification of WC1 and WC2 (pcr product ; 08-01-16)

Agarose gel: 1%

100 mV, 30 min

=> No amplification observed

- Gel verification for NLP22 inserted in psB1C3

Fisrt, the plasmid is digested with EcorI and PstI (1h at 37°C)

Agarose gel: 1%

100 mV, 30 min

=> NOTHING

SEQUENCING

- Some miniprep tubes are send to a sequencing platform to verify the efficacy of cloning

psB1C3 P2A GFP 1

psB1C3 pFRQ 2

psB1C3 NLP22 3

=> Sequencing came back: GOOD !!

TRANSFORMATION

- Transformation in DH5α of:

pFB001 containing pRPS27 (LB + Ampicilline)

psB1C3 containing pUNC119 (LB + Chloramphenicol)

psB1C3 containing pXBP1

psB1C3 containing DSIP

- Agar plates put at 37°C

CLONING

- Cloning of DSIP in psB1C3 with:

Digest tubes kept on the fridge (date)

Enzymes used: EcorI and PstI

- Ligation

DSIP in psB1C3

Put on the fridge overnight

08-05-16

TRANSFORMATION

- Transformation in DH5 α of:
psB1C3 containing DSIP (LB + Chloramphenicol)
- Agar plates put at 37°C

PCR

- Amplification of:
pRPS27
+ Control

Hybridation temperature used: XX°C

Elongation time used: XXsec

GEL MIGRATION

- Gel verification of pRPS27 amplification (done the 08-05-16)

Agarose gel: 1%

100 mV, 30 min

=> No amplification observed

SET UP MINICULTURES

- Pick selected colony and put it in 6mL of LB with chloramphenicol

psB1C3 containing DSIP (X6)

psB1C3 containing pFRQ GFP (X3)

psB1C3 containing pFRQ NLP22 (X3)

psB1C3 containing pXBP1 (X3)

psB1C3 containing pUNC119 (X3)

- Put at 37°C on the shaking incubator

CLONING

- Cloning of NLP22 in psB1C3 with:

Digest tubes kept on the fridge

Ligation tube kept on the fridge

Enzymes used: EcoRI and PstI

TRANSFORMATION

- Transformation in DH5 α of:

psB1C3 containing NLP22 (LB + Chloramphenicol)

- Put agar plates at 37°C

PCR

- Amplification of:

pRPS27

+ Control

Hybridation temperature used: 61°C

Elongation time used: 25 sec

MINIPREP

- Miniprep kit used on 08-08-16 tubes:
 - psB1C3 containing DSIP (X6)
 - psB1C3 containing pFRQ GFP (X3)
 - psB1C3 containing pFRQ NLP22 (X3)
 - psB1C3 containing pXBP1 (X3)
 - psB1C3 containing pUNC119 (X3)

QUANTITATIVE ANALYSIS

psB1C3 DSIP 1: 66,2 ng/ μ L
psB1C3 DSIP 2: 73,4 ng/ μ L
psB1C3 DSIP 3: 66,6 ng/ μ L
psB1C3 DSIP 4: 44,0 ng/ μ L
psB1C3 DSIP 5: 53,7 ng/ μ L
psB1C3 DSIP 6: 61,4 ng/ μ L
psB1C3 pFRQ GFP 1: 9,8 ng/ μ L
psB1C3 pFRQ GFP 2: 5,7 ng/ μ L
psB1C3 pFRQ GFP 3: 8,3 ng/ μ L
psB1C3 pFRQ NLP22 1: 39,1 ng/ μ L
psB1C3 pFRQ NLP22 2: 66,3 ng/ μ L
psB1C3 pFRQ NLP22 3: 53,7 ng/ μ L
psB1C3 pXBP1 1: 45,7 ng/ μ L
psB1C3 pXBP1 2: 90,0 ng/ μ L
psB1C3 pXBP1 3: 62,4 ng/ μ L
psB1C3 pUNC119 1: 59,1 ng/ μ L
psB1C3 pUNC119 2: 82,6 ng/ μ L
psB1C3 pUNC119 3: 45,7 ng/ μ L

PCR

- Amplification of:
 - pU6 (pMB70)
 - pU6 (gDNA of *C.elegans*)
 - + Control

Hybridation temperature used: 65°C

Elongation time used: 10 sec

GEL MIGRATION

- Gel verification of some miniprep tubes:

First, plasmids are digested with EcoRI and PstI (1h at 37°C)

Agarose gel: 1%

100 mV, 30 min

Gel Map:

Ladder

psB1C3 DSIP 1

psB1C3 DSIP 2

psB1C3 DSIP 3

psB1C3 DSIP 4

psB1C3 pFRQ GFP 1

psB1C3 pFRQ GFP 2

psB1C3 pFRQ GFP 3

psB1C3 pFRQ NLP22 1

psB1C3 pFRQ NLP22 1

psB1C3 pFRQ NLP22 1

=> GOOD:

psB1C3 pFRQ NLP22 2

- Gel verification of pU6 amplification

Agarose gel: 1%

100 mV, 30 min

Gel Map:

Ladder

Control

pU6 (pMB70)

pU6 (C. Elegans's gDNA)

=> Amplification of pU6 (gDNA)

TRANSFORMATION

- Transformation in DH5α of:

pMB70 containing pU6 (LB + Kanamycine)

- Agar plate put at 37°C

CLONING

- Cloning done with frozen miniprep tubes
 - psB1C3 containing DSIP
 - psB1C3 containing NLP22
 - psB1C3 containing pFRQ
 - psB1C3 containing pU6

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing DSIP (LB + Choramphenicol)
 - psB1C3 containing NLP22
 - psB1C3 containing pU6
- Agar plate put at 37°C

GEL MIGRATION

- Gel verification of some miniprep tubes (08-09-16):
 - Fisrt, plasmids are digested with EcoRI and PstI (1h at 37°C)
 - Agarose gel: 1%
 - 100 mV, 30 min

Gel Map:

Ladder
psB1C3 DSIP 5
psB1C3 DSIP 6
psB1C3 pXBP1 1
psB1C3 pXBP1 2
psB1C3 pXBP1 3
psB1C3 pUNC119 1
psB1C3 pUNC119 2
psB1C3 pUNC119 3

=> GOOD:

psB1C3 DSIP 5
psB1C3 DSIP 6
psB1C3 pXBP1 2
psB1C3 pXBP1 3

SET UP MINICULTURES

- Pick selected colony and put it in 6mL of LB with chloramphenicol
psB1C3 pFRQ GFP (X1)
psB1C3 NLP22 (X2)
- Put on the shaking incubator at 37°C

PCR

- Amplification on C.elegans's gDNA of:
pRPS27
pmyo 1
pmyo 2
pUNC119
pXBP1
- Amplification on Neurospora terrasperma's gDNA of:
WC1
WC2
+ control

Hybridation temperature used: 65°C
Elongation time used: 2 min 15 sec

GEL MIGRATION

- Gel verification of amplifications
Agarose gel: 1%
100 mV, 30 min

Gel Map:

Ladder
Control
pRPS27
pRPS27
pXBP1
pUNC119
WC1
WC2
pmyo2
pmyo3

=> GOOD:

pXBP1
WC1
WC2

MINIPREP

- Miniprep kit used on 08-10-16 tubes:
 - psB1C3 NLP22 1
 - psB1C3 NLP22 2
 - psB1C3 pFRQ GFP 4

QUANTITATIVE ANALYSIS

psB1C3 NLP22 1: 103,7 ng/μL
psB1C3 NLP22 2: 71,4 ng/μL
psB1C3 pFRQ GFP 4: 11,7 ng/μL

GEL MIGRATION

- Gel verification of miniprep tubes:
 - Fisrt, plasmids are digested with EcoRI and PstI (1h at 37°C)
 - Agarose gel: 1%
 - 100 mV, 30 min

Gel Map:

Ladder
psB1C3 NLP22 1
psB1C3 NLP22 2
psB1C3 pFRQ GFP 4
control (empty psB1C3)
psB1C3 pFRQ 5
psB1C3 pFRQ NLP22 3
psB1C3 pUNC119

=> [Weird results](#)

SET UP MINICULTURES

- Pick selected colony and put it in 6mL of LB with chloramphenicol
 - psB1C3 containing pFRQ
 - pMB70 containing pU6
- Put on the shaking incubator at 37°C

SEQUENCING

- Some miniprep tubes are send to a sequencing platform to verify the efficacy of cloning:
 - psB1C3 DSIP 6
 - psB1C3 pFRQ NLP22 2
 - psB1C3 pXBP1 2

=> Sequencing came back: Only psB1C3 pXBP1 is good

CLONING

- Cloning of pU6 in psB1C3 GFP
 - pU6 cut with EcorI and SpeI
 - psB1C3 cut with XbaI and PstI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3 GFP
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 GFP containing pU6 (LB + Choramphenicol)
- Put on the incubator at 37°C

CLONING

- Ligation of pFRQ in psB1C3 GFP (with digested tubes kept on the fridges 07-28-16)
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 GFP containing pFRQ (LB + Choramphenicol)
- Put on the incubator at 37°C

PCR

- Amplification of:
pRPS27
+ Control

Hybridation temperature used: 61°C

Elongation time used: 35 sec

GEL MIGRATION

- Gel verification of amplification
Agarose gel: 1%
100 mV, 30 min

=> No amplification observed

PCR

- Amplification of:
pmyo2
pmyo3
pUNC119
+ Control

Hybridation temperature used: 65°C

Elongation time used: 1 min 10 sec

GEL MIGRATION

- Gel verification of amplification
Agarose gel: 1%
100 mV, 30 min

Gel Map:

Ladder
Control
pUNC119
pmyo2
pmyo3

=> Successful amplification of pmyo2

SET UP MINICULTURES

- Pick selected colony of agar plates kept on the fridge and put it on 6mL of LB + Chloramphenicol
 - psB1C3 containing DSIP (X2)
 - psB1C3 containing pFRQ and NLP22 (X2)
 - psB1C3 containing pXBP1 (X2)
- Put on the shaking incubator at 37°C

CLONING

WC1 cut with XbaI and PstI
WC2 cut with EcoRI and SpeI

NLP22 cut with EcoRI and PstI
pFRQ cut with EcoRI and PstI
DSIP cut with EcoRI and PstI

DSIP cut with EcoRI and XbaI
psB1C3 P2A GFP cut with EcoRI and XbaI

- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3 P2A GFP
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put on the fridge (4°C) overnight

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing WC1 (LB + Chloramphenicol)
 - psB1C3 containing WC2
 - psB1C3 containing NLP22
 - psB1C3 containing pFRQ
 - psB1C3 containing DSIP
 - psB1C3 containing DSIP P2A GFP
- Put agar plates on the incubator at 37°C

SET UP MINICULTURES

- Pick selected colony of agar plates kept on the fridge and put it on 6mL of LB + Chloramphenicol
 - psB1C3 containing pU6 (X1)
 - psB1C3 containing DSIP (X2)
 - psB1C3 containing NLP22 (X3)
- Put on the shaking incubator at 37°C

MINIPREP

- Miniprep kit used on 08-10-16 tubes:
 - pMB70 pU6 1
 - psB1C3 pFRQ A
- Miniprep kit used on 08-11-16 tube:
 - psB1C3 DSIP A1
 - psB1C3 DSIP B1
 - psB1C3 pFRQ NLP22 A
 - psB1C3 pFRQ NLP22 B
 - psB1C3 pXBP1 A
 - psB1C3 pXBP1 B

QUANTITATIVE ANALYSIS

pMB70 pU6 1: 79,2 ng/ μ L
psB1C3 pFRQ A: 68,8 ng/ μ L
psB1C3 DSIP A1: 28,9 ng/ μ L
psB1C3 DSIP B1: 46,5 ng/ μ L
psB1C3 pFRQ NLP22 A: 33,1 ng/ μ L
psB1C3 pFRQ NLP22 B: 53,2 ng/ μ L
psB1C3 pXBP1 A: 47,2 ng/ μ L
psB1C3 pXBP1 B: 57,3 ng/ μ L

CLONING

- Cloning of pU6 in psB1C3 containing DSIP (psB1C3 DSIP 5)
 - pU6 cut with EcorI and XbaI
 - psB1C3 cut with EcorI and XbaI
 - Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put on the fridge (4°C) overnight

TRANSFORMATION

- Transformation in DH5 α of:
psB1C3 containing pU6 DSIP (LB + Chloramphenicol)
- Put agar plates on the incubator at 37°C

MINIPREP

- Miniprep kit used on 08-12-16 tubes:
 - psB1C3 containing pU6 1
 - psB1C3 containing DSIP 1
 - psB1C3 containing DSIP 2
 - psB1C3 containing NLP22 1
 - psB1C3 containing NLP22 2
 - psB1C3 containing NLP22 3

PCR

- Amplification of:
 - pRPS27
 - pUNC119
 - pmyo3
 - + Control

Hybridation temperature used: 68°C

Elongation time used: 1 min 10 sec

GEL MIGRATION

- Gel verification of amplification
 - Agarose gel: 1%
 - 100 mV, 30 min

=> No amplification observed

- Gel verification of cloning (08-15-16 miniprep tubes)
 - Fisrt, the plasmid is digested with EcorI and PstI 1h at 37°C (+ control only digested with P)
 - Agarose gel: 1%
 - 100 mV, 30 min

Gel Map:

Ladder
Control
psB1C3 NLP22 A
psB1C3 NLP22 B
psB1C3 NLP22 C
psB1C3 DSIP A
psB1C3 DSIP B
psB1C3 pU6

=> NOTHING

SET UP MINICULTURES

- Pick selected colony of agar plates and put it on 6mL of LB + Chloramphenicol
 - psB1C3 containing DSIP 2A (X4)
 - psB1C3 containing pFRQ (X2)
 - psB1C3 containing NLP22 (X4)
 - psB1C3 containing DSIP (X2)
 - psB1C3 containing pU6 DSIP (X2)
 - psB1C3 containing WC1 (X2)
 - psB1C3 containing WC2 (X1)
- Put on the shaking incubator at 37°C

MINIPREP

- Miniprep kit used on 08-16-16 tubes:

- psB1C3 DSIP 2A GFP 1
- psB1C3 DSIP 2A GFP 2
- psB1C3 DSIP 2A GFP 3
- psB1C3 DSIP 2A GFP 4
- psB1C3 pFRQ B1
- psB1C3 pFRQ B2
- psB1C3 NLP22 B1
- psB1C3 NLP22 B2
- psB1C3 NLP22 B3
- psB1C3 NLP22 B4
- psB1C3 DSIP 1
- psB1C3 DSIP 2
- psB1C3 pU6 DSIP 1
- psB1C3 pU6 DSIP 2
- psB1C3 WC1 1
- psB1C3 WC1 2
- psB1C3 WC2 1

GEL MIGRATION

- Gel verification of miniprep tubes

Fisrt, the plasmid is digested with EcorI and PstI 1h at 37°C

Not for WC1 and WC2 (others enzymes used)

+ control only digested with P

Agarose gel: 1%

100 mV, 30 min

Gel Map:

Ladder

Control

psB1C3 NLP22 1

psB1C3 NLP22 2

psB1C3 NLP22 3

psB1C3 NLP22 4

psB1C3 DSIP 2A GFP 1

psB1C3 DSIP 2A GFP 2

psB1C3 DSIP 2A GFP 3

psB1C3 DSIP 2A GFP 4

psB1C3 pFRQ B1

psB1C3 pFRQ B2

=> Weird results

Gel Map:

Ladder

Control

psB1C3 WC1 1

psB1C3 WC1 2

psB1C3 WC2 1

psB1C3 pU6

psB1C3 DSIP 1

psB1C3 DSIP 2

psB1C3 pU6 DSIP 1

psB1C3 pU6 DSIP 2

=> [Weird results](#)

SET UP MINICULTURES

- Pick selected colony of agar plates and put it on 6mL of LB + Chloramphenicol
 - psB1C3 containing WC1 (X2)
 - psB1C3 containing WC2 (X2)
- Put on the shaking incubator at 37°C

CLONING

- Cloning of pU6 in psB1C3
 - pU6 cut with EcorI and PstI
 - pU6 cut with EcorI and SpeI
 - psB1C3 cut with EcorI and PstI
 - psB1C3 GFP cut with EcoRI and XbaI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5α of:
 - psB1C3 containing pU6 (LB + Chloramphenicol)
 - psB1C3 GFP containing pU6
- Agar plates put at 37°C

PCR

- Amplification of:
 - pRPS27 (pFB001)
 - pRPS27 (gDNA)
 - pmyo3
 - pUNC119
 - + Control

Hybridation temperature used: 63°C

Elongation time used: 1min 10sec

GEL MIGRATION

- Gel verification of amplification
 - Agarose gel: 1%
 - 100 mV, 30 min

=> No amplification observed

PCR

- Amplification of:
 - pU6 (pMB70)
 - pU6 (gDNA)
 - + Control

Hybridation temperature used: 65°C

Elongation time used: 10sec

GEL MIGRATION

- Gel verification of amplification
 - Agarose gel: 1%
 - 100 mV, 30 min

Gel Map:

Ladder

Control

pU6 (pMB70)

pU6 (gDNA)

=> Successful amplification of pU6 (pMB70)

CLONING

- Cloning of:
 - pU6 cut with EcorI and SpeI
 - psB1C3 GFP cut with EcoRI and XbaI
 - psB1C3 pFRQ cut with SpeI and PstI
 - psB1C3 GFP cut with XbaI and PstI
 - NLP22 cut with XbaI and PstI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3 (3 tubes)
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put on the fridge overnight

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing pU6 and GFP (LB + Chloramphenicol)
 - psB1C3 containing pFRQ and NLP22
 - psB1C3 containing pFRQ and GFP
- Agar plates put at 37°C

CLONING

- Cloning of:
 - DSIP cut with EcoRI and PstI
 - NLP22 cut with EcoRI and PstI
 - psB1C3 cut with EcoRI and PstI
 - psB1C3 GFP cut with EcoRI and XbaI
 - P2A cut with EcoRI and SpeI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3 (3 tubes)
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing DSIP (LB + Chloramphenicol)
 - psB1C3 containing NLP22
 - psB1C3 containing P2A and GFP
- Agar plates put at 37°C

SET UP MINICULTURES

- Pick selected colony and add it on 6mL of LB with Chloramphenicol
 - DSIP in psB1C3 (X2)
 - NLP22 in psB1C3 (X2)
 - pFRQ in psB1C3 (X2)
 - pU6 DSIP in psB1C3 (X2)
 - DSIP P2A GFP in psB1C3 (X2)
- Put tubes on the shaking incubator at 37°C

CLONING

- Cloning of:
 - pU6 cut with EcoRI and SpeI
 - DSIP cut with EcoRI and XbaI
 - pFRQ cut with EcoRI and SpeI
 - NLP22 cut with EcoRI and XbaI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of IDT plasmid (2 tubes)
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put on the fridge overnight

PCR

- Amplification of:
 - pRPS27 (pFB001)
 - pRPS27 (gDNA)
 - + Control

Hybridation temperature used: 61°C

Elongation time used: 35sec

TRANSFORMATION

- Transformation in DH5 α of:
 - IDT plasmid containing pU6 and DSIP (LB + Ampicillin)
 - IDT plasmid containing pFRQ and NLP22
- Agar plates put at 37°C

CLONING

- Cloning of pmyo2:
 - pmyo2 cut with XbaI and SpeI
 - psB1C3 cut with XbaI and SpeI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of IDT plasmid (2 tubes)
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10min
- Ligation
 - Put on the fridge overnight

MINIPREP

- Miniprep of:
 - WC1 in psB1C3 (X1)
 - WC2 in psB1C3 (X1)

GEL MIGRATION

- Gel verification of amplification (08-18-16) and miniprep tubes
First, the plasmid is digested 1h at 37°C
Agarose gel: 1%
100 mV, 30 min

Gel Map:

Ladder
Control
pRPS27 (plasmid)
pRPS27 (gDNA)
psB1C3 WC1
psB1C3 WC2

=> GOOD:
psB1C3 WC2

PCR

- Amplification of:
pmyo3
pUNC119
+ Control

Hybridation temperature used: 63°C
Elongation time used: 1min 05sec

GEL MIGRATION

- Gel verification of amplification
Agarose gel: 1%
100 mV, 30 min

=> No amplification observed

SITE DIRECTED MUTAGENESIS

- Amplification with specific primers allowing mutagenesis of:
psB1C3 pXBP1 (on XbaI site)
psB1C3 WC2
+ control

Hybridation temperature used: 50°C
Elongation time used: 1min 05sec

- Put tubes on the fridge

MINIPREP

- Miniprep of:

- psB1C3 WC1 A
- psB1C3 WC2 A
- psB1C3 NLP22 A
- psB1C3 NLP22 B
- psB1C3 pU6 DSIP A
- psB1C3 pU6 DSIP B
- psB1C3 DSIP A
- psB1C3 DSIP P2A GFP A
- psB1C3 pFRQ A
- psB1C3 pFRQ B

SET UP MINICULTURES

- Pick selected colony and add it on 6mL of LB with Chloramphenicol

- P2A in psB1C3 GFP (X2)
- pFRQ NLP22 in psB1C3 (X2)
- DSIP in psB1C3 (X2)
- NLP22 in psB1C3 (X2)
- pFRQ in psB1C3 GFP (X1)

- Put tubes on the shaking incubator at 37°C

PCR

- Amplification of:

- pRPS27 (pFB001)
- pRPS27 (gDNA)
- + Control

Hybridation temperature used: XX°C

Elongation time used: XXsec

END OF SITE DIRECTED MUTAGENESIS

- Add 1 μ L of DnpI on:
mutated pXBP1
mutated WC2
- Put at 37°C during 1h

TRANSFORMATION

- Transformation in DH5 α of:
psB1C3 containing mutated WC2 (LB + Chloramphenicol)
psB1C3 containing mutated pXBP1
psB1C3 containing pmyo2
- Agar plates put at 37°C

GEL MIGRATION

- Gel verification of amplifications and miniprep tubes (08-19-16)
First, the plasmid is digested 1h at 37°C
Agarose gel: 1%
100 mV, 30 min

Gel Map:

Ladder
psB1C3 WC1
psB1C3 WC2
Control
pRPS27 (gDNA)
pRPS27 (pFB001)

=> GOOD:

psB1C3 WC1
psB1C3 WC2

SET UP MINICULTURES

- Pick selected colony and add it on 6mL of LB with Ampicillin
IDT plasmid containing pU6 DSIP (X3)
IDT plasmid containing pFRQ NLP22 (X3)
- Put tubes on the shaking incubator at 37°C

GEL MIGRATION

- Gel verification of miniprep tubes
First, the plasmid is digested 1h at 37°C
Agarose gel: 1%
100 mV, 30 min

Gel Map:

Ladder

psB1C3 NLP22 A

psB1C3 NLP22 B

Control

psB1C3 pFRQ A

psB1C3 pFRQ B

psB1C3 pU6 DSIP A

psB1C3 pU6 DSIP B

psB1C3 DSIP A

psB1C3 pFRQ GFP A

=> GOOD:

psB1C3 NLP22 B

psB1C3 pFRQ A

psB1C3 pFRQ GFP A

SITE DIRECTED MUTAGENESIS

- Amplification with specific primers allowing mutagenesis of:
psB1C3 WC1
+ control

Hybridation temperature used: 55°C

Elongation time used: 2min 10sec

- Add 1µL of DnpI on:
mutated WC1

- Put at 37°C during 1h

TRANSFORMATION

- Transformation in DH5α of:
psB1C3 containing mutated WC1 (LB + Chloramphenicol)
- Agar plates put at 37°C

SEQUENCING

- Some miniprep tubes are send to a sequencing platform to verify the efficacy of cloning
 - psB1C3 NLP22 B
 - psB1C3 pFRQ GFP A
 - psB1C3 pFRQ NLP22 A

=> **Sequencing came back: psB1C3 pFRQ GFP A = GOOD !!**

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing pU6 GFP (LB + Chloramphenicol)
 - psB1C3 containing pU6
- Agar plates put at 37°C

CLONING

- Digest of
 - pU6 with EcoRI and SpeI
 - psB1C3 GFP with EcoRI and XbaI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3 GFP
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10 min
- Ligation
 - NLP22 in psB1C3
 - pFRQ in psB1C3
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing pU6 (LB + Chloramphenicol)
 - psB1C3 containing pU6 and GFP
- Agar plates put at 37°C

PCR

- Amplification of:
pUNC119
pmyo3
+ control

Hybridation temperature used: 60°C
Elongation time used: 1min 10sec

GEL MIGRATION

- Gel verification of amplifications
Agarose gel: 1%
100 mV, 30 min

=> No amplification observed

MINIPREP

- Miniprep of:
pIDT pU6 DSIP 1
pIDT pFRQ NLP22 1

GEL MIGRATION

- Gel verification of miniprep tubes
Agarose gel: 1%
100 mV, 30 min

=> Nothing

PCR

- Amplification of:
pUNC119
pmyo3
+ control

Hybridation temperature used: 55°C
Elongation time used: 1min 10sec

GEL MIGRATION

- Gel verification of amplifications (08-23-16)

Agarose gel: 1%

100 mV, 30 min

=> No amplification observed

SET UP MINICULTURES

- Pick selected colony and add it on 6mL of LB with Chloramphenicol

pmyo2 in psB1C3 (XWC22)

mutated WC1 in psB1C3 (X2)

mutated WC2 in psB1C3 (X2)

mutated pXBP1 in psB1C3 (X2)

- Put tubes on the shaking incubator at 37°C

MINIPREP

- Miniprep of:

pU6 DSIP in pIDT

pFRQ NLP22 in pIDT

pU6 DSIP in psB1C3

NLP22 in psB1C3

GEL MIGRATION

- Gel verification of cloning

First, the plasmid is digested with EcoRI and PstI 1h at 37°C (+ control only digested with P)

Agarose gel: 1%

100 mV, 30 min

Gel Map:

2-log ladder

empty vector

psIDT pU6 DSIP

psIDT pFRQ NLP22

psB1C3 pU6 DSIP

psB1C3 NLP22

=> Nothing

PCR

- Amplification of:
 - pUNC119
 - pmyo3
 - + control

Hybridation temperature used: 65°C
Elongation time used: 1min 10sec

SET UP MINICULTURES

- Pick selected colony and add it on 6mL of LB with Chloramphenicol
 - pU6 in psB1C3 GFP (X1)
 - pFRQ NLP22 in psB1C3 (X2)
 - pFRQ GFP in psB1C3 (X1)
 - DSIP in psB1C3 (X2)
 - NLP22 in psB1C3 (X2)
- Put tubes on the shaking incubator at 37°C

GEL MIGRATION

- Gel verification of amplifications and miniprep tubes (08-24-16)
 - Fisrt, the plasmid is digested with EcorI and PstI 1h at 37°C (+ control only digested with P)
 - Agarose gel: 1%
 - 100 mV, 30 min

- Gel map:
 - 2-log Ladder
 - Control
 - pmyo2
 - pUNC119
 - pIDT pU6 DSIP
 - pIDT pFRQ NLP22
 - psB1C3 pU6 DSIP

=> GOOD:

pIDT pU6 DSIP
pIDT pFRQ NLP22

TRANSFORMATION

- Transformation in DH5α of:
 - psB1C3 containing pU6 and DSIP (LB + Chloramphenicol)
- Agar plate put at 37°C

MINIPREP

- Miniprep of:

- psB1C3 pU6 1
- psB1C3 DSIP A
- pIDT pU6 DSIP A
- pIDT pFRQ NLP22 A
- psB1C3 mutated pXBP1 1
- psB1C3 mutated WC1 1
- psB1C3 mutated WC2 1
- psB1C3 pmyo2 1

GEL MIGRATION

- Gel verification of miniprep tubes

Fisrt, the plasmid is digested with EcorI and PstI 1h at 37°C (+ control only digested with P)

Agarose gel: 1%

100 mV, 30 min

- Gel map:

2-log Ladder

Control

psB1C3 pU6 1

psB1C3 DSIP A

pIDT pU6 DSIP A

pIDT pFRQ NLP22 A

psB1C3 mutated pXBP1 1

psB1C3 mutated WC1 1

psB1C3 mutated WC2 1

psB1C3 pmyo2 1

=> GOOD:

psB1C3 mutated WC1 1

psB1C3 mutated WC2 1

psB1C3 mutated pXBP1 1

QUANTITATIVE ANALYSIS

psB1C3 pU6: 333,5 ng/μL

pIDT pU6 DSIP: 500,8 ng/μL

pIDT pFRQ NLP22: 240 ng/μL

PCR

- Amplification of:

pUNC119

+ control

Hybridation temperature used: 63°C

Elongation time used: 1min 10sec

CLONING

- Digest of
 - mutated WC1 with EcoRI and XbaI
 - mutated WC2 with EcoRI and XbaI
 - pU6 with EcoRI and SpeI
 - psB1C3 GFP with EcoRI and XbaI
 - pFRQ with SpeI and PstI (pIDT)
 - NLP22 with XbaI and PstI (pIDT)
 - pFRQ with SpeI and PstI
- Put on the incubator at 37°C during 1h
- Dephosphorylation
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10 min
- Ligation
 - pU6 and mutated WC1 in psB1C3
 - pU6 and mutated WC2 in psB1C3
 - pU6 and GFP in psB1C3
 - pFRQ and NLP22 in pIDT
 - pFRQ and NLP22 in psB1C3
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5 α
- Agar plates put at 37°C

SITE DIRECTED MUTAGENESIS

- Amplification with specific primers allowing mutagenesis of:
 - psB1C3 pXBP1
 - + control

Hybridation temperature used: 50°C

Elongation time used: 1min 05sec

- Add 1 μ L of DnpI on:
 - mutated pXBP1
- Put at 37°C during 1h

TRANSFORMATION

- Transformation in DH5 α of:
psB1C3 containing mutated pXBP1 (LB + Chloramphenicol)
- Agar plates put at 37°C

WORM INJECTION

- **Injection of pU6 DSIP in several worms with an other plasmid containing DsRed**

QUANTITATIVE ANALYSIS

psB1C3 mutated WC1: 59,2 ng/ μ L
psB1C3 mutated WC2: 75,3 ng/ μ L
psB1C3 mutated pXBP1: 126,2 ng/ μ L